

A SUCCESSFUL CASE  
OF  
ABDOMINAL SECTION FOR  
INTUSSUSCEPTION;

WITH REMARKS ON THIS AND OTHER METHODS OF TREATMENT.

BY  
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Received October 21st—Read November 11th, 1873.

THE case of intussusception which I am about to describe came under my care at the London Hospital in 1871.

The patient was a somewhat delicate female child aged two years. She had previously been seen by my colleague Mr. Waren Tay, who had diagnosed her disease, and by whom she was transferred to my care in order that she might be admitted as an in-patient.

From her anus there protruded a portion of bowel about two inches long, deeply congested and much swollen. By the side of this the finger could be passed, its full length, into the rectum without reaching the point at which the intussusception began. On carefully examining the extremity of the protruded part, I noticed that it did not present merely a rounded opening as usual in such cases. I was able easily to identify the pouch and valve of the cæcum, with the

opening into the ileum. Of these parts it was of course the mucous membrane which was visible, and the appendix cœci was wholly concealed between the folds of the intussusception. This discovery rendered it evident that we had to deal with an involution of bowel of very unusual length, which commencing at the cæcum had allowed the ileum to pass through the entire length of the colon, and actually to become extruded at the anus.

On examination of the child's abdomen externally the tract of bowel involved could be felt like a long firm sausage passing down the left side.

The mother of the child gave us the history that the latter had begun to suffer from pains in the abdomen, rather suddenly, about a month previously. Her first attack of pain was one Sunday afternoon, and was such as to cause screaming. It was quickly followed by a motion, which contained blood, and by frequent vomiting. A fortnight after this, the child having been ailing the whole time, a protrusion of bowel was noticed at the anus. This was reduced by the surgeon then in attendance, and a cork pad was fitted over it. It was found impossible, however, to prevent the prolapse from recurring, and the child continued to be sick and to pass blood-stained mucus.

Three days before admission the prolapse increased to such a size that the parents were unable to reduce it, and were obliged on three occasions to call in surgical aid for that purpose. There had been no real obstruction of the bowels, but only temporary constipation at times.

The child, at the time of her admission, looked very ill. Her countenance was pale and anxious, and from her mother's description it was evident that her strength had been failing rapidly during the last few days. It appeared that she was almost constantly engaged in straining to get rid of the bowel which filled the rectum.

Our first measure of treatment consisted in putting the child under chloroform, and then, whilst she was held up by the feet, distending the rectum to the utmost with warm water.

By this means the involuted part could be forced up into the abdomen so as to be quite out of reach of the finger, and once or twice I tried to hope that reduction had been effected. On each occasion, however, when the lower bowel was allowed to empty itself, the intussuscepted part became prolapsed as before, and showed clearly that we had gained nothing.

My experience of several other somewhat similar cases, all of which had resulted in death, after patient and repeated attempts by the injection plan, did not encourage me to expect success in this.

It was very evident, from the child's condition, that unless relief were afforded she would not live long, and I therefore felt justified in telling the parents that although an operation would be, in itself, very dangerous, yet I thought that it afforded the only chance.

They begged me to give the child the chance if I thought it was one, and we accordingly determined to lose no time.

The child having been taken up into the operation theatre, chloroform was again administered, and I then opened the abdomen in the median line below the umbilicus, and to an extent admitting of the easy introduction of two or three fingers. I now very readily drew out, at the wound, the intussuscepted mass, which was about six inches long. I found that the serous surfaces did not adhere, and that there was no difficulty whatever in drawing the intussuscepted part out of that into which it had passed. Just as the reduction was finished the appendix cæci made its appearance, confirming the opinion which had been formed as to the precise part of the bowel involved. The opposed serous surfaces did not present a single flake of lymph, and they were congested in only a moderate degree.

Having completed the reduction, I put the bowel back into the abdomen, and closed the wound with harelip pins and interrupted sutures.

The operation had been an extremely simple one, and had not occupied more than two or three minutes.

The abdomen having been well supported by strapping,  
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cotton wool, and a flannel bandage, the child was returned to bed.

The after-treatment consisted in the use of milk enemata every three hours, with the occasional addition of five minims of tincture of opium.

No vomiting occurred after the operation. No food whatever was allowed to be taken by the mouth during the next two days. The temperature, on the evening of the operation, was  $100.5^{\circ}$ , but subsequently fell to  $99^{\circ}$ , and with the exception of the fifth day, on the evening of which it rose to  $101.7^{\circ}$ , it never exceeded  $100^{\circ}$ . Chloroform was administered on two or three occasions to allow of the wound being dressed without the child's screaming. The pins were taken out on the fourth day, that is, seventy-two hours after the operation.

I had felt much anxiety as to the healing of the abdominal wound on account of the thinness of the parietes, but nothing untoward occurred.

The child recovered without having ever showed the slightest symptom of peritonitis, and left the hospital in excellent health about three weeks after the operation.

Nothing but fluid food (milk and beef tea) had been allowed through the greater part of this time from a fear of producing any return of the intussusception. The child was fitted with an abdominal support when discharged, but the scar was sound and strong, and there was no tendency to bulging.

The successful issue of a single case goes but a very little way towards proof that the line of practice adopted was the proper one. I purpose, therefore, with the permission of the Society, to discuss this question in some detail; and the first items of evidence which I will mention are the cases which had previously come under my own observation.

About twelve years ago I operated for harelip upon a delicate child about ten months old. The child had been brought from Somersetshire on purpose to have the operation done, otherwise its feeble state of health would have caused

me to defer it. The lip healed well, but about the tenth day the child began to pass blood and slime. On examination *per anum* I found a long intussusception occupying the rectum. It never protruded at the anus. I tried during six days a great variety of means with a view to the replacement of the involution. Chloroform was repeatedly given. Injections of air and of water were made over and over again, and in various positions of the body, and attempts were also made with a long tube to push the bowel into place. Several times I thought I had succeeded, and on one occasion the passage of a considerable quantity of *faeces* made me feel confident that reduction had been effected. About six hours after this occurred, however, the child, who had been gradually failing in strength, died. No post-mortem was permitted, and I am unable to state whether the reduction was complete. My colleague, Mr. John Adams, had, on one occasion, seen the patient in consultation with me, and had assisted in attempts at reduction.

A few years later I saw another similar case in consultation with Dr. James and Dr. Bright, at Forest Hill. Our patient was a remarkably fine healthy boy, of about three years of age. A long intussusception occupied his rectum, and came low down, although it never actually protruded. Again we tried every plan that we could think of, but without success. Enemata were used in the most forcible manner with the child's body inverted, and they were repeated several times a day, and often under the influence of chloroform. Bougies of various kinds were also carefully tried.

The child sank from exhaustion about a fortnight after the commencement of the symptoms.

Dr. James obtained a post-mortem which confirmed the diagnosis as to the condition of parts.

A third case was brought under my notice by Mr. Waren Tay three years ago. Its subject was a female child aged about fifteen months. Blood had been noticed escaping from the bowel on the day before Mr. Tay was consulted. The child had great pain and was repeatedly sick. On

examination of the bowel, Mr. Tay discovered at the distance of two or three inches from the anus the extremity of a long intussusception. The portion of bowel involved could also be easily felt through the abdominal wall. Repeated attempts were made by manipulation and by injections to effect replacement of the bowel, but without success, and on the seventh day from the commencement of the symptoms the child died. The autopsy showed an intussusception of the transverse into the descending colon, involving, however, only about two inches of the bowel. It was thought probable that the greater portion had been reduced. The small intestines were much distended, and were somewhat congested on their peritoneal surface, but were quite free from lymph. There were no adhesions whatever of the opposed peritoneal surfaces of the intussuscepted part, and it could have been reduced by traction with the greatest ease.

The particulars of a fourth case, which occurred in a young adult man, have been recorded by me in vol. vii, p. 193, of the 'Pathological Society's Transactions.' In this case the patient lived four months from the commencement of his symptoms, and at the post-mortem six inches of the ileum, the entire cæcum, and first part of the ascending colon, were found invaginated within the latter. The coats of the bowel were much thickened, but there were no adhesions, and reduction by traction from within would have been quite practicable.

My experience does not afford a single case at all to be compared with the preceding, in which the patient survived. I treated successfully, by means of injections under chloroform, a case in which I had conjectured that intussusception was present, but the diagnosis did not rest on any certain data, and the stage was a very early one. The patient was a delicate little boy. He had been sick, and had passed slime and blood. I thought that I could feel through the abdominal wall a lump very much like that caused by an intussusception, but there was nothing to be

felt by the rectum. After a free injection under chloroform the bowels acted and the child recovered.

In another case I had a good deal of trouble with a short intussusception about five inches from the anus, which had resulted from the too rapid reduction of an ordinary prolapse of the rectum, seven or eight inches in length. In this instance, after a considerable manipulation, I was successful in effecting a complete reduction.

Thus, it will be seen that at the time the case which is the subject of this paper came under my care my own experience did not supply a single one at all parallel to it in which the patient had been saved; whilst in three all endeavours had resulted in disappointment. In fact, such had been the impression which these cases had made upon my mind, that I had quite determined to resort to operation when next any similar one should present itself.

The case which I have brought before the Society is, so far as I am aware, the first successful one of its kind in English practice. The operation itself, however, is by no means a novelty, and at least three examples of its successful performance are on record.

I may be permitted briefly to refer to the particulars of these.

In one recorded by Velse, and quoted by M. Hévin, in the 'Memoirs of the Royal Academy of Surgery of Paris,' 1784, the patient was a woman aged 50. Intussusception was diagnosed by Nuck, at whose suggestion the operation was performed. The incision was made on the left side of the abdomen, four fingers' breadth from the umbilicus. The intestine was drawn out, and the intussusception was liberated without difficulty, as no adhesions were encountered. The wound was closed and the patient recovered, and lived for twenty years afterwards. In the performance of this operation the intestines were fomented with tepid milk, and the intussuscepted part was well oiled. It is spoken of as having been very easy of performance.

The next case occurred in 1825, and is recorded by Dr. Fuchsius, of Olpe, in 'Hufeland's Journal' (quoted in the

'Edinburgh Medical and Surgical Journal,' July, 1825. Its subject was a man aged 68, who was seen on the sixth day of his illness. In the neighbourhood of the navel, rather on the right side, there was evident hardening and tenderness, which increased and somewhat changed position during attacks of spasm. After five days of further treatment by clysters, &c., the abdomen was opened. An incision was made on the outer edge of the right rectus two inches above the navel. The intussusception was soon found. There were no adhesions, but such difficulty was encountered in effecting reduction that the surgeon decided to open the intestine. This was done by an incision two inches long, admitting of the introduction of the fingers into the intussuscepted part. Reduction was then accomplished, about two feet of bowel being disengaged. The wound in the intestine was stitched up. The patient recovered. The operator recommends, I have no doubt very judiciously, that in future operations the incision should be made in the linea alba, and that, if it be necessary to put stitches in the intestine, they should be cut close off instead of being left with a long end, to come out at the abdominal wound.

A third case of recovery occurred in the practice of an American surgeon, Dr. Wilson, and is recorded in the 'American Journal of the Medical Sciences' for 1836. The patient was a negro aged 20, and the intussusception had lasted seventeen days. There were adhesions, and great difficulty was encountered.

In British practice the operation appears to have been performed only once, and then under very unfavorable circumstances. The patient was an infant only four months old, in whose case Mr. Spencer Wells was consulted, on the fourth day of an intussusception with acute symptoms. The diagnosis was positive, for the involuted portion of intestine could be reached by the finger in the rectum. It was not till the fifth day, when the patient was almost dying, that the parents of the child consented to the operation. The abdomen was opened in the middle line below the umbilicus. The intussuscepted portion was easily found,



but the constriction was so tight that it was not without great difficulty that it was reduced. Its release was at length accomplished, the intestines returned, and the wound closed. The bowel above the constriction being greatly distended with flatus some needle punctures were made for its relief. The child died about five hours after the operation.

As regards other fatal cases after operation, as already implied, I have not been able to find any in English records. Several continental writers refer vaguely to such, and some speak of them as if they had been numerous. I have found a case reported by Carrier, of which the following are the particulars (as given in 'Virohow's Jahresbericht'). The patient was a man aged 23. Pain came on suddenly, and a tumour could be felt in the ileo-cæcal region. On the fifteenth day the abdomen was opened, and an attempt was made to extricate an intussusception which was discovered, but the attempt was unsuccessful. The small intestine higher up was therefore opened. The patient died seven hours afterwards. The post-mortem showed an intussusception of the ileum into the cæcum.

Fatal cases have also been recorded by Max Hertz, Pirogoff, and Gerson. In two of these great difficulties were encountered in freeing the intussuscepted part, and in Pirogoff's case it was found impracticable.

Before attempting further to discuss the propriety or otherwise of this operation I may suitably refer to the symptoms which characterise intussusception, and to some of its natural terminations.

There is a class of cases, and, perhaps, not a very small one, of which the one I have recorded is an example, in which all obscurity as to diagnosis is removed by the discovery of the intussuscepted bowel in the rectum. In all suspected cases this examination should be made. It is quite evident from the descriptions given of the post-mortems in many cases that had the bowel been sought for by the anus it could have been felt. The symptom next in value,

and, indeed, perhaps not second in real importance, is the manipulation of the abdomen and the discovery of the long or oval sausage-like mass which an intussusception constitutes. This is far more easily done than is generally thought possible, especially so with the aid of chloroform. Unless the parietes of the abdomen be fat my impression is that by firm pressure, the patient being under the full influence of an anæsthetic, all doubt as to the existence or non-existence of intussusception, and as to the completeness or incompleteness of its reduction, may usually be removed.

Amongst the other less important symptoms we must mention pain in the abdomen, attacks of spasms, the passage of bloody mucus or of pure blood by stool, the existence, in some cases, of obstruction of the bowels, and in some of almost constant desire to strain at stool. These symptoms will vary much in degree of severity in different cases, and it is of considerable practical importance to remark that the cases may be roughly grouped, much as we do those of hernia, by reference to the tightness of the constriction. We have cases of intussusception accompanied by *strangulation*, and we have others which are *irreducible* only. The former tend rapidly either to the death of the patient, or his relief by gangrene of the constricted part. Their duration is rarely more than a few days. Those, however, in which there is only an irreducible invagination without either stoppage of the contents of the tube or interruption in its blood-supply may run a prolonged course, and they have a greatly diminished chance of spontaneous cure by gangrene. It is in these latter that operative interference is most necessary and has the fairest chance of success. In these the patient may live on for weeks, and the surgeon is permitted a good opportunity both for establishing his diagnosis and proving the inutility of other measures of treatment. The patient's death when it at length arrives is brought about more by exhaustion from long-continued pain than from any inflammatory process. In this class of cases I believe it would seldom be found that the coats of the intestine had become adherent to each other, or that there was any material

difficulty in effecting reduction after opening the abdomen. If the operation were resorted to in cases of *acute strangulation* there would always be the risk that the surgeon might find the parts in a state of gangrene, and might discover that he had interfered only to take away the patient's last chance.

It seems, therefore, of great importance to insist that before attempting the operation the tightness of the strangulation should be estimated.

The diagnosis between mere irreducibility and tight strangulation will usually be easy. In the one there will be severe sickness, constipation, and great general distress tending to collapse, whilst in the other the bowels will continue to act, sickness will be almost wholly absent, and the patient may suffer comparatively little.

I cannot better illustrate this statement than by reminding the Society that in my own case the state of things had existed for a month, and that so slight had been the patient's general symptoms that a surgeon had ordered a cork pad to keep back what he supposed to be an ordinary prolapse.

The same mistake is mentioned as having occurred in several other cases on record.

If in a case of tight strangulation with severe symptoms the patient were seen early and quite before any indications of collapse had appeared, my impression is that opening the abdomen (insufflation, &c., having failed) would be safer than to leave the case to the chance of cure by gangrene, but if the stage were more advanced I think I should prefer to give opium and trust to nature's method.

Before finally deciding as to the need of surgical interference in that class of cases in which, as I have just shown, it is alike most hopeful and most necessary, we must ask what other chances of recovery are before the patient.

Given a case of intussuscepted bowel without sickness and without constipation, therefore, presumably without strangulation, what degree of probability is there that recovery may be obtained either by natural processes or by methods of treatment short of operation? I have just hinted that the

chances of gangrene are not great.<sup>1</sup> The constriction is not tight enough to cause it, and although it must be granted that in a few instances after the bowel has remained for considerable periods in a state of mere incarceration, gangrene does eventually occur, yet it is a rare event; much more commonly the patient sinks from exhaustion. If the chances of recovery by gangrene be but little my impression is that those by spontaneous return of the parts to their natural condition, or their reduction under treatment by insufflation, &c., are much less. At any rate the surgeon will soon know how much he has to hope in either of these directions. I have not found any case recorded in which spontaneous return of a well-recognised intussusception occurred, and those in which art succeeded are comparatively few. It is, of course, the surgeon's duty to give a patient trial to injections, to use fluids and air alternately, and to use them with the patient's body inverted and with the muscles set at complete rest by an anæsthetic, but if he should not succeed quickly by these means it is not likely that he will succeed at all.

<sup>1</sup> Nor must it be forgotten that even when gangrene occurs it does not necessarily lead to recovery. In several cases in the table appended to this paper death followed the expulsion of the detached portion. Dr. Hilton Fagge, in an excellent paper in the 'Guy's Hospital Reports' for 1869, writes as follows upon this point: "Now, as we have already seen in ileo-cæcal intussusception 'expulsion' comparatively seldom occurs, and when it does occur it frequently only postpones the fatal termination instead of entirely preventing it. The patient dies some months afterwards from contraction of the cicatrix, which had formed at the seat of the disease. This appears to me to afford a weighty additional argument in favour of the attempt to explore and pull out an ileo-cæcal intussusception, when the case is directly diagnosed at an early stage, and when inflation has failed to overcome the disease." The precise cause of death suggested by Dr. Fagge is a very probable one, but there are others yet more frequent. A case under the care of M. Fanchon ended fatally three days after the expulsion, there being an abscess at the seat of disease. A case recorded by Dr. Baillie, in which a yard of colon had been passed, resulted in the death of the patient three weeks afterwards. In two other cases death occurred two and four weeks respectively after the sloughing. In another a post-mortem showed a cavity containing fæces, which intervened between the two ends of the bowel; and in another, fever, vomiting, and diarrhœa, preceded death.

Nearly all the recorded instances of success were very recent cases or cases in which the intussusception was small. They serve but little to encourage the surgeon when he encounters such a case as that which I have just recorded. In very few, indeed, was the intussusception long enough to be felt in the rectum, and in scarcely any did success follow after several failures. The opinion of some of our best authorities is so definite on this point that they recommend that all attempts at replacement should be abandoned if they have not succeeded within a short period.

The literature of intussusception is very large, and it is not my intention to trouble the Society with any attempts at its statistical analysis.

My friend and colleague Mr. Waren Tay has, however, kindly collected for me references to a great number of cases, and from these I may be permitted to extract such facts as may seem to bear most definitely on the subject under discussion. We have confined our attention to cases in which the intussusception occurred in the lower bowel.

In the table appended to this report will be found the particulars of numerous cases in which the intussuscepted part presented into the rectum, and either was or might have been felt by the finger. This table must not be considered in any sense exhaustive, but it may yet furnish us with some valuable data.

Of these cases a very few ended in recovery *without gangrene*. In one of these an infant aged eighteen months, in whom an intussusception could be felt by the finger in the rectum, was treated early under the care of Dr. Steele by powerful injections of warm water, and had no return of the symptoms. In a second, a child, under the care of M. Cabaret, had prolapse of bowel from the anus twelve inches in length; whilst at the same time a sound could be passed up for some distance between the rectal mucous membrane and the invaginated parts. Reduction was effected by a gum elastic bougie, which was retained for several hours to prevent relapse. A similar measure was successful in the hands of Dr. Osborne, in a very similar case. It is to be noted that in

all these three cases it would appear to have been the lower part of the colon only which was involved, and it is obvious that in such the chance of success is far greater than when the cæcum or the small intestine comes down.

In the first of the cases of recovery *after gangrene* the patient was a boy aged 6, in whom the early symptoms had been those of strangulation. The bowel appeared at the anus, and about the eighth day a portion, twenty-three inches, came away. In the second case, again, we have symptoms of severe strangulation, and the patient, a girl aged 11, appeared to be at the point of death. As early as the fifth day a portion of colon, cæcum, and mesentery, measuring nearly fourteen inches, was detached.

In the third case the patient was a man aged 40, who voided twenty-eight inches of colon on the fourteenth day.

The fourth case is one of the most interesting on record, from the unusual length of the period before the bowel separated. The specimen was exhibited by Dr. Quain, before the Pathological Society, and the case is recorded in the tenth volume of its 'Transactions.' The patient, a boy aged 5, had suffered for four months from obscure abdominal symptoms, and was finally relieved by the escape of twelve inches of bowel including the cæcum, part of the ileum and part of the colon. He had had irregular constipation and some sickness, but at times his appetite had been voracious. He had never passed blood.

In the fatal cases the influence of early age in accelerating the event seems well marked, a large majority being infants under the age of one year, who died after periods of from one to three days' illness.

It is clear that if, in infants, operative interference is to be of any use it must be resorted to very early. Examination of the cases in which the patient was under two years of age shows that eleven died within two days, five lived as long as the sixth or seventh day, one to the twentieth, and a single very exceptional one survived for a period of nine weeks. This last case is published by Mr. Sidney Jones in the 'Pathological Society's Transactions.' In it the small intes-

tine had travelled through the entire length of the colon, and protruded at the anus until as much as six inches were visible. The child had free action of the bowels, took the breast well, and never vomited. In the first instance, however, severe symptoms of obstruction had been present. Death was finally caused by exhaustion from straining and by the slowly progressing gangrene of the extruded portion. Mr. Jones mentions in his account of the post-mortem a fact of very great importance in reference to the question of operation — that the serous surfaces of the opposed portions of bowel were adherent along their whole extent by firm, fibrous membrane.

In the absence of any data as to the manner in which operations of this kind are borne by very young children we shall probably be right in believing that they are far less hopeful than in those somewhat older. On the other hand it is our duty to remember that the cure by sphacelus, which occurs with tolerable frequency in others, is scarcely ever met with in infants, and that unless rectification is obtained by injections, without much delay, speedy death is almost certain to result.

Very valuable information might be furnished to the surgeon by post-mortem examination as to the feasibility of operative interference in these cases ; unfortunately, however, but few of those who have published cases give us specific details on this point. During the last session of the Pathological Society, Dr. Edwards Crisp exhibited a specimen from a child aged eight weeks, with the statement that so tightly was the invaginated part enclosed that it would have been impossible to withdraw it. Mr. Sidney Jones in one case, as just mentioned, found the peritoneal surfaces universally and firmly adherent. In two cases of my own and in one of Mr. Waren Tay's it was found, at the post-mortem, that traction from within the abdomen easily reduced the invagination, and that there was no material damage to the coats of the bowel. In a very considerable number of published cases the details of the post-mortem warrant the belief that an operation would not have been difficult, since no mention

is made either of tightness of constriction, adhesions or gangrene.<sup>1</sup>

One fact disclosed by post-mortem records I may ask especial attention to, and that is the almost uniform absence of peritonitis as a complication. This is specially noted in a great number of cases. In intussusception as in strangulated hernia, and other forms of abdominal obstruction, it may, I think, be taken as an established fact, that unless actual perforation has occurred there will be no peritonitis.

In conclusion, that I may not further weary the Society by the details of isolated facts, I may briefly record my conviction that any one who will carefully examine the evidence for and against will come to the conclusion that operations for the relief of intussusception are not only warrantable, but that in a large number of cases they are urgently demanded.

The cases most hopeful are those in which the symptoms denote incarceration rather than strangulation, and in them the surgeon may take the knife in hand with a good prospect that he will encounter no serious obstacle, and that he will not find either very tight constriction, adhesions, or gangrene. Of the other cases, there are many in which, if the patient be seen early, there is sufficient hope, notwithstanding the severity of the symptoms, to justify the operation, though the surgeon must expect in such to find occasionally that the conditions preclude its completion. Lastly, in a small minority, seen late, or in which the symptoms have from the first been extremely severe, it is probably wisest to

<sup>1</sup> I do not know that we shall gain much by citing the opinions of authors for or against this operation. Amongst many who dissuade us from it are, Dr. Brinton, Mr. Holmes, and Mr. Pollock. On the other side, MM. Rilliet and Barthez, who base their opinion on post-mortem examinations, in which they found reduction very easy, state that "after employing medical treatment during three or four days, and after having made several attempts at inflation, we should not hesitate to perform gastrotomy." Drs. Meigs and Pepper, who quote the above passage, appear to be quite favorably disposed to the operation, and Dr. West's conclusion is to the same effect. Dr. Hilton Fagge, after a careful summing-up of evidence, is a decided advocate of the operation, but suggests it would be well for the surgeon to wait until a case comes before him which is known not to be already of long standing.



decline an operation and to trust to the chance of gangrene.

The following conclusions are appended by way of summary of the facts and statements contained in my paper.

### *Conclusions.*

1. That it is by no means very uncommon for intussusception to begin at the ilio-cæcal valve, and to progress to such a length that the invaginated part is within reach from the anal orifice or even extruded.

2. That it is of great importance in all cases of suspected intussusception to examine carefully by the anus.

3. That in almost all cases of intussusception in children, and probably most in adults, the diagnosis may be made certain by handling the invaginated part through the abdominal wall.

4. That the prognosis of cases of intussusception varies much; first in ratio with the age of the patient; and, secondly, with the tightness of the constriction.

5. That in a large proportion of the cases in which children under one year are the patients, death must be expected within from one to six days from the commencement.

6. That in the fatal cases death is usually caused by shock or by collapse from irritation and not by peritonitis.

7. That in many cases it is easy, by estimating the severity of the symptoms (vomiting, constipation, &c.), to form an opinion as to whether the intestine is strangulated or simply irreducible.

8. That in cases of strangulated intussusception, whilst there is great risk of speedy death, there is also some hope that gangrene may be produced and spontaneous cure result.

9. That in cases in which the intussuscepted part is incarcerated and not strangulated, there is very little hope of the occurrence of gangrene, and it is probable that the patient

will die, after some weeks or months, worn out by irritation and pain.

10. That the chances of successful treatment, whether by the use of bougies or by the injection of air or water, are exceedingly small, excepting in quite recent cases, and that if the surgeon does not succeed by them promptly it is not likely that he will succeed at all.

11. That the cases best suited for operation are those which have persisted for some considerable time, and in which the intestine is only incarcerated, and that these cases are also precisely those least likely to be relieved by any other method.

12. That in the cases just referred to, after failure by injections, bougies, &c., an operation is to be strongly recommended.

13. That the records of post-mortems justify the belief that, in a considerable portion of the cases referred to, the surgeon will encounter no material difficulty in effecting reduction after opening the abdomen.

14. That the circumstances which might cause difficulty are, first, the tightness of the impaction of the parts; secondly, the existence of adhesions; and thirdly, the presence of gangrene.

15. That in selecting cases suitable for operation the surgeon should be guided by the severity of the symptoms, in his estimate of the tightness of the strangulation, and also as to the probability of gangrene having already set in.

16. That in cases in which the patient's symptoms are very severe, or the stage greatly advanced, it may be wiser to decline the operation and trust to the use of opiates.

17. That the operation is best performed by an incision in the median line below the umbilicus.

18. That in cases of intussusception in young infants (under one year of age) the prognosis is very desperate, scarcely any recovering excepting the few in whom injection treatment is immediately successful, whilst a large majority die very quickly.

19. That the fact just referred to may be held to justify,

in the case of young infants, very early resort to the operation.

20. That it is very desirable that all who in the future have the opportunity for post-mortem examination of intussusception cases should give special attention to the question as to whether an operation would have been practicable, and should record their results.

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#### TABULAR STATEMENT

*Of the Results of different Plans of Treatment, &c., in Cases of Intussusception of or into the Lower Bowel.*

THE following table has been compiled for me by Mr. Warren Tay, and comprises cases more or less closely similar to the one which is the subject of my paper. We have selected from various sources the recorded examples of intussusception of the bowel, *in which the intestine passed low down into the colon*. We did not wish to include cases in which the small intestine alone was involved, since these, both as regards treatment, symptoms, and probable results, belong to a different category. It was necessary, therefore, to adopt some definite line of limitation, and this we have found in the presence or otherwise of the intussuscepted part in the rectum. It is believed that no cases are included in the following list in which the bowel was not either discovered by the finger or, at any rate, might have been, had an efficient examination been made. It will be seen that this discovery of the bowel by the finger is a symptom of the utmost importance, since it places the diagnosis, both of the nature of the lesion and the part of bowel involved, beyond question.

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
1	Dr. Trevor, Am. Jour. Med. Sci., Jan., 1852, p. 277	12 years, M.	Occasional pain for two or three weeks, then severe pain followed by vomiting; tumour felt in left side of abdomen and on rectal examination; attempts at replacement with stomach tube, etc.	4 days, death	Intussusception of 12 inches of jejunum into the succeeding 13; the mass thickened by inflammation; there was no general peritonitis; the upper end was just below and within the arch and descending colon, and the lower end was firmly impacted in the pelvis; two smaller ones were found of 2 inches and 1 inch in length	Was diagnosed. This was small intestine, yet forced down nearly to anus.
2	Mr. E. Y. Steele, Lancet, 1849, vol. i, p. 680	8 mos., M.	Passage of blood; tumour felt in rectum; slight prolapse; enemata, etc., were without avail	2 or 3 days? death	No post-mortem obtained.	
3	Do.	4 mos., M.	Tumour felt in the rectum; various efforts at reduction made, but without avail	2 days, death	No general peritonitis; the lower end of the ileum, the cæcum, the ascending and greater part of the transverse colon, were invaginated into the sigmoid flexure; the upper two thirds of the innermost portion were of a claret colour, the lower third greenish brown, and in a state of complete sphacelus.	
4	Do, Lancet, 1859, March 19, p. 287	18 mos., F.	Tumour felt in the rectum; "a considerable length of invaginated gut was occupying the rectum," there was a watery discharge tinged with blood; the case was treated early by powerful injection of warm water and subsequent cautious narcotism	6 to 12 hours, recovery	There was no feeling perceptible as if the intussusception had suddenly given way, but the gut did not again bulge down into the rectum	An instance of success by enemata.

5	Cabaret, Rev. de Ther. Med. Chir., 13, 1868, Schmidt's Jahrbuch, 101, 1859, p. 322	2 years, M.	Constipation after diarrhoea, then prolapsus which could be replaced; on seventh day a sudden prolapse, which could not be reduced; on the eighth day twelve inches of colon were prolapsed, while a sound could be passed a long way upwards by the side of it	7 days, recovery	Attempts to reduce with the fingers only were without avail; Le Pelletier's method was successful; pressure with a gum-elastic sound, which was not removed finally till the third day, as the prolapse recurred a few minutes after the pressure was withdrawn	Probably the prolapse was of rectum chiefly. Compare with the first mentioned, on page 39.
6	Dr. Worthington, Am. Journ. Med. Sciences, Jan., 1849, p. 97	3½ years	For two years had had various intestinal symptoms; for six weeks had diarrhoea and protrusion of bowel at the anus	6 weeks? death	The cecum was invaginated along the whole length of the colon and rectum, carrying with it the lower portion of the ileum and the first part of the colon; more than 2 feet of bowel had been inverted; the cecum must have passed through the sphincter in the child's efforts to evacuate the bowels.	
7	Mr. T. Blizard, Med. Chir. Trans., vol. i, p. 169, 1812	5 mos., M.	A tumour about the size of an egg on the left side of the abdomen	4 days, death	The lower end of the ileum, the cecum and its appendix, the ascending colon, &c., were invaginated into the sigmoid flexure and rectum to within 1½ inch of the anus; there was no peritonitis; the invaginated parts were gangrenous; "they might have separated had the child's constitution not given way."	
8	Mr. Langstaff, Edin. Med. Journ., July, 1807, p. 263	3 mos., ?	Vomiting; passage of blood and mucus; hard tumour felt on the left side of the abdomen; prolapsus	5 days, death	The end of ileum, the cecum, and colon invaginated into rectum; there was also a smaller invagination in the opposite direction.	

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
9	Penquier, L'Union Médicale, Aug. 22, 1861; Dr. Smith, Amer. Journ. Med. Sci., Jan., 1862	4 mos., M.	Passage of blood; tumour felt five or six inches from the anus, and a hard elongated tumour in the left iliac fossa	2 days, death	Cæcum and its appendix, ascending and transverse colon into descending colon, close to rectum. It is stated that invagination of the large intestine is common among children in Brittany, where the practice prevails of bandaging them tightly in linen and leaving them alone for some hours.	
10	Dr. Carter, Lancet, June 9, 1849, p. 607	4 mos., F.	A large sausage-like body felt in left iliac region; enemata only reached a certain point	6 days, death	Invagination found in left iliac region, but not described	Probably could have been felt per anum.
11	Mr. Nind, Lancet, 1849, vol. i, p. 681	4 mos., M.	One sanguineous stool	4 days, death	Cæcum and ascending colon in sigmoid flexure. "The invagination was so complete that from the congestion, &c., which had occurred I could not reduce it till the enclosing portion of the gut was divided nearly in its whole length;" it "was of a deep purplish colour, with small ash-coloured patches of gangrene."	Ditto.
12	Dr. Edwards, Med. Times & Gaz., 1861, vol. ii, p. 531	3½ years, M.	Pain and swelling of right side of abdomen, which passed away eight months previously; prolapse, which could be returned four months previously; for two days the prolapse became permanent	4 days? death	<i>Post-mortem</i> .—A portion of bowel 2½ inches in length protruded from the anus; a large mass could be felt in the left side of the abdomen; the cæcum and colon invaginated into descending colon, sigmoid flexure and rectum; the part protruding	

13	Mr. Ash, Med. Times & Gaz., 1867, vol. ii, p. 505; Brit. Med. Journ., 1868, vol. i, p. 117	6 years, F.	A tumour could be felt within the anus, and finally a prolapse occurred; attempts to push the tumour back unsuccessful	10 days, death	from the anus consisted of the inverted cæcum and its appendix, and the opening of the ileo-cæcal valve was visible on the prolapsed part. A post-mortem was obtained, but no description of the state of parts is given; it is called an intussusception of the rectum.
14	Mr. Young, Brit. Med. Journ., vol. ii, p. 779, 1869	9 mos., M.	A tumour could be seen and felt less than an inch from the anus	28 hours, death	<i>Post-mortem</i> .—Ileum, cæcum, and colon invaginated into colon and rectum.
15	Dr. Philipson, Brit. Med. Journ., Sept. 24, 1864	10 mos., M.	Tumour felt about four inches from the anus; repeated attempts at reduction (digital, enemata, and insufflation) unsuccessful	28 hours, death	Ileum, cæcum, and colon, invaginated into colon and rectum, the lowest portion of the tumour being the part near the ileo-cæcal valve. "An attempt was made to reduce the tumour in the same manner as during life, but was quite unsuccessful. Traction was then made on the small intestine, and it was only dislodged after a considerable amount of force." "The cæcum and appendix were then drawn out, but still more force was required; the adhesions were very firm."
16	Dr. Merriman, Lancet, 1844, vol. ii, p. 298	Child	Not given	4 days, death	Cæcum, appendix, and ileo-cæcal valve invaginated into colon  Probably might have been felt if examination per anum had been made during a straining fit.

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
17	Mr. Snow, <i>ibid.</i>	Child	Not given	Death	Ileum into sigmoid flexure	Same as No. 16.
18	Markwick, <i>Lancet</i> , 1846, vol. ii	4 mos.	Blood passed; the symptoms began soon after birth	4 mos.? death	The colon was intussuscepted into the sigmoid flexure; it was impossible to withdraw it	Ditto.
19	Clark, <i>Lancet</i> , 1849, vol. ii, p. 206	6 mos.	Left side of abdomen hard and prominent	2 days, death	Ileum, cæcum, and colon intussuscepted into descending colon	Ditto.
20	Burford, <i>Lancet</i> , Oct. 31, 1840	6 mos.	Passage of blood	3 days, death	<i>Post-mortem</i> .—"Was surprised to find the rectum fall," Ileum, cæcum, and colon invaginated into sigmoid flexure and rectum.	
21	M. Robin. M. Hénin's <i>Mémoire</i> in <i>Mém. de l'Acad. Roy. de Chir.</i> , t. xi, p. 324	3½ years	Prolapsus after suffering more or less for three months	6 days, death	Cæcum and greater part of colon in the rectum. "It was found impossible to withdraw the invaginated intestine, it had contracted strong adhesions."	
22	M. le Blanc. M. Sabatier's <i>Mémoire</i> ( <i>Mém. de l'Acad. Roy. de Chir.</i> , t. xv, p. 35)	A child	Prolapse six or seven inches in length	15 days, death	Ileum, cæcum, and colon, were invaginated into the rectum; it was impossible to reduce this.	
23	M. Puy, quoted by M. Sabatier ( <i>l. c.</i> )	40 years, M.	Prolapse to the extent of about six inches; the first attack occurred about two months before death, but he apparently recovered from this	16 hours, death	Ileum and colon invaginated into the rectum.	



24	MM. Roux et Lavernet, quoted Dict. des Sciences Med., vol. xxiii, p. 560	—	—	Death	The sigmoid flexure of the colon was invaginated into the rectum to the extent of 13 inches.	
25	Dr. Ash, quoted by Hunter, Trans. Soc. for Imp. Med. Chir. Knowledge, vol. i, p. 108	9 mos., M.	Discharge of blood; tumour felt in the left iliac fossa	60 hours, death	Ileum, cæcum, and colon invaginated into colon and rectum.	
26	Monro, sen., Morbid Anat. Alimentary Canal; Dr. Smith, Am. Journ. Med. Sci., Jan., 1862	4 mos., M.	Slime and blood discharged	68 hours, death	Ileum and colon into colon and rectum.	
27	Mr. Clarke, Lancet, Feb. 10, 1838 (Gorham, Guy's Hosp. Rep., Oct., 1838, p. 331)	11 mos.	Hæmorrhage	62 hours, death	Ileum, cæcum, and colon into colon, close to sigmoid flexure	? Could have been felt.
28	Dr. Baer, Am. Jour. Med. Sci. (Gorham, l. c.)	16 mos.	Hæmorrhage, and large tumour felt in left iliac region	48 hours, death	Ileum, cæcum, and colon into sigmoid flexure.	
29	Mr. Cunningham, Med. Gaz. Sept. 15, 1838 (Gorham, l. c.)	9 mos.	Hæmorrhage, and tumour felt in left iliac region	40 hours, death	Ileum, cæcum, and colon in sigmoid flexure and rectum.	
30	Mr. Whately, Phil. Trans., vol. lxxvi, p. 305	M.	"The valve of the colon at last got as low as the anus, and when he went to stool he only emptied the ileum"	Death	Ileum, cæcum, and colon in sigmoid flexure and rectum.	

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
31	Dr. O. Ferral, Dub. Path. Soc., Lond. Med. Times, Jan. 16, 1847 (Dr. Smith, l. c.)	12 mos., M.	Intense pain, passage of mucus and blood	6 days, death	Ileum and cæcum into colon; there were two orifices, one leading into the ileo-cæcal valve, the other into the appendix	Probably could have been felt.
32	W. S. Partridge, and Prov. Med. and Surg. Journ., May 3, 1848 (Dr. Smith, l. c.)	4 years	Passage of blood and mucus	3 days, death	Ileum, cæcum, and colon invaginated into rectum	Ditto.
33	Dr. Harland, Med. and Phys. Res., Philad., p. 565 (Dr. Smith, l. c.)	5 mos., F.	Prolapse	Not stated, death	Ileum, cæcum, and colon into colon and rectum; the cæcum protruded from the anus.	
34	Mr. Davies, Med. Repos., Dec., 1824 (Dr. Smith, l. c.)	6 years, F.	Diarrhœa, passage of mucus and blood	8 months, death	Ileum, cæcum, and colon into colon and rectum	Probably could have been felt.
35	Dr. Kennedy, Dub. Journ. Med. Science, March 4, 1844 (Dr. Smith, l. c.)	4 mos.	Passage of blood	1 day, death	Ileum, cæcum, and colon were invaginated	Ditto.
36	Mr. Perrin, Lancet, March 26, 1853 (Dr. Smith, l. c.)	3 mos.	Bloody stools	2 days, death	Ileum, cæcum, and colon, in descending colon and sigmoid flexure	Ditto.
37	Dr. Smith (l. c., Case 34)	3 mos., M.	Passage of mucus and blood; prolapse twelve hours before death; distension in right iliac region	7 days, death	Ileum, cæcum, and colon into colon, &c.	

				9 days, recovery	Portion of intestine not stated	Recovery sloughing.
38	Levi Gaylord, Am. Journ. Med. Sci., October, 1827 (Dr. Smith, 1. c.)	6 years, M.	Vomiting, constipation, then an evacuation; prolapse after seven or eight days, and the next day 23 inches separated			
39	Jacobi (Dr. Smith, 1. c.)	—	Tumour felt two or three inches from anus	Death	An invagination was found in the rectum.	
40	Monro, Edin. Phys. and Lit. Essays, vol. ii, p. 386	18 mos., M.	Prolapse; after reduction a tumour could be detected with an opening at the lower part like an os tincae; large enemata were given, and a long probe of whale- bone armed with sponge was used, but without success	A few days, death	The invagination began just below the upper part of the sig- moid flexure.	
41	Mr. Stanley, Lan- cet, March 11, 1826, p. 813	Middle age, F.	Prolapsus	Death	A surgeon gently pulled at the intestine, and a yard and three inches came away; it proved to be a portion of ileum.	
42	Mr. Howship, Ed. Med. & Surg. Journ., April, 1812	4 mos., F.	Passage of blood; injections failed	6 days, death	The lower part of the colon and the upper part of the rectum were invaginated into the rectum. He regrets "that this was not felt during life."	
43	Mr. J. W. Bow- man, ib., Oct. 1813	11 years, F.	Obstruction of the bowels and every symptom of approaching dissolution	5 days, recovery	Portion of colon, caecum, and mesentery, measuring 19½ inches, passed by stool	? Could probably have been felt. Re- covery by gan- grene.
44	Mr. Valentine, ib., April, 1826	40 years, M.	Passed 28 inches of colon	14 days, recovery	—	Ditto, ditto.
45	Mr. Sydney Jones, Path. Tr., vol. viii, p. 179	4 mos., M.	Passage of mucus and blood; improvement for three weeks; at the end of forty-six days, pro- lapse; this increased till as much as 6 inches protruded	9 weeks, death	The lower part of the ileum had passed along the whole length of the colon and out at the anus; it was still pervious; there were evi- dences of progressive sloughing.	

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
46	Mr. Holmes, Path. Trans., vol. viii, p. 177	40 years, M.	Tumour felt at a distance of about half an inch from the anus	10 days? death	The sigmoid flexure of the colon and the upper part of the rectum were invaginated. In the middle of the ascending colon was a ragged opening, from which faeces had escaped.	
47	Mr. Ballard, ib., p. 185	6 mos., F.	Blood-stained fluid passed per anum	4 days, death	Ileum, caecum, and colon invaginated into rectum within two inches of the anus.	
48	Dr. Quain, ib., vol. x, p. 160	5 years, M.	Pain in region of bladder; no passage of blood; sickness and constipation	4 mos., recovery	8 inches of the ileum, the caecum, and 4 inches of the colon were passed by the anus	? Could probably have been felt. Recovery by sloughing.
49	Dr. Buchanan, ib., p. 171	7 mos., F.	Passage of blood; physical examination of the abdomen negative	53 hours, death	Ileum, caecum, and colon invaginated into sigmoid flexure and rectum to within half an inch of the anus. The intestine could be withdrawn without special difficulty	Stress is laid on the importance of an anal examination.
50	Mr. Nunneley, ib., vol. xi, p. 109	3 years, M.	Passage of a little bloody mucus	11 days, death	A foot of ileum had passed through the ileo-caecal valve into the large intestine; there was no appearance of inflammation whatever, neither lymph nor blood was effused	? Could have been felt.

51	Dr. Lettsom, Phil. Trans., vol. lxxvi, p. 305	4 years, F.	No special symptoms noted; child not seen for three weeks	3 mos, death	<i>Post-mortem.</i> —A finger introduced into the anus detected a round substance in the rectum, with an opening in the middle, not unlike an os-tincæ; the finger passed completely round this between it and the wall of the rectum; the enclosed intestine was in a state of commencing gangrene, but could be easily withdrawn; a portion of ileum contained was uninvolved, so was the appendix cæci.	Recovery after reduction by a bougie.
52	Dr. Osborne, Aitken's Medicine, vol. ii, p. 814	A child	Tumour felt in the rectum; at the end of thirty-four hours it almost presented at the anus; an elastic bougie was passed into the orifice and pushed up; it carried the intestine with it, but "more owing to straightening of the canal than any force used"	2 days? recovery	—	
53	Dr. Thomson, Edin. Med. Journ., pp. 300 and 316. From an Italian source	40 years, F.	After seven or eight days colic symptoms; passage of part of colon, the cæcum and its appendix; a month later there were still colicky symptoms, and a hard, circumscribed tumour could be felt in the left iliac region	50 days, death	When the omentum was raised, two openings were found in the colon, one of which received the ileum and its mesentery; the omentum performed the part of an outer coat, so that no faeces escaped from the intestine. The rectum "appeared full of faeces, but on being cut up the ileum and mesentery, for a Parisian foot, were found pushed into the colon as far as the rectum."	

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
54	Dr. Greig, Edin. Med. Journ., Oct., 1862, p. 312	4 mos., M.	Passage of blood; tumour in left side of abdomen; an enema could not be thrown up	42 hours, death	Ileum, cæcum, and colon invaginated into rectum to within an inch of the anus. "After removal of the tumour the cæcum was easily drawn out of the colon, and restored to its natural position, but the greatest difficulty was experienced in getting the swollen, small intestine reduced through the ileo-cæcal valve, which seemed even then to be in a spasmodic condition."	Dr. Greig narrates four other cases which recovered under the use of inflation, but in these the tumour was on the right side, probably short intussusceptions. In one of them he had to inflate several times.
55	Dr. Greene, Brit. Med. Journ., March 18, 1871, p. 278	4½ mos.	A tumour, much resembling a small sausage in shape and density, was felt on left side of abdomen; passage of slime	Several days, death	Ileum, cæcum, and colon into descending colon and sigmoid flexure.	
56	Dr. J. St. C. Gray	5 years, M.	Tenesmus, passage of blood at first, then of blood-stained mucus. "There was considerable tympanites, but nothing was ascertained tending to throw light on the case, either by percussion or by examination of the rectum by the finger." Turpentine enemata, then various remedies	8 days, death	There was no trace of peritonitis; colon was invaginated into colon and upper part of rectum; the cæcum was not involved	The distance from the anus is not stated, but possibly by pressing on the abdomen, and examining during straining, the finger might have reached the "upper part of the rectum."
57	Mr. King, Lancet, June 17, 1854	6 years, M.	Suddenly seized with symptoms of ileus; in four days convulsions and insensibility	11 days, recovery	The cæcum and appendix, with part of the ascending colon, passed per anum; afterwards the right lower extremity became swollen and gangrenous, the leg separating at the knee-joint	Recovery after gangrene.

58	Hennet, Pr. Ver. Ztg. n. F., 1, 31, 1858. Schmidt's Jahrb., 101, 1859, p. 321	Adult, M.	Sudden passage of blood in vomit and by anus, constipation, and pain; clysters of no avail; petechiæ on various parts of the body; great prostration. On the 9th day some improvement. On the 12th day feces passed. 13th day the man drew attention to a mass protruding from his anus	12 days, recovery	The cæcum and the vermiform appendix were passed per anum; the gut was in sufficiently good condition for the longitudinal bands, &c., to be made out; the man was a mere skeleton at the time the spasm occurred, and though he immediately began to improve, it was six months before he resumed his duties as a soldier	Recovery by gangrene.
59	M. Sobaux. (M. Hévin, Mém. de l'Acad. Roy. de Chir., t. xi, 1784)	Adult, M.	A portion of colon, 23 inches in length, passed per anum after about three weeks' illness	3 weeks, recovery	—	Ditto.
60	M. Fauchon. (M. Hévin, l. c.)	48 years, M.	The whole of the cæcum, with 6 inches of the colon, and the same length of ileum, were passed after twenty-five days' illness; the patient seemed well afterwards, but died three days later	28 days, death	An abscess communicating with the gut was found	Death after gangrene and separation of gut.
61	Dr. Thomson, Edin. Med. Journ., 1835, p. 301	40 years, M.	The man was thrown down and trampled on; after some weeks he suddenly felt something in the rectum; at last protrusion occurred, and when he laid hold of the mass extruded he pulled away intestine	Some weeks, recovery	The portion of intestine was a span in length, and at one end was found the ileo-cæcal valve	Recovery by gangrene.
62	Dr. Thomson, l. c., p. 304	11 years, F.	Very severe abdominal symptoms; threatened dissolution	5 days, recovery	A portion of the colon, the cæcum and maso-colon measuring 13½ inches, was passed by the anus	Ditto.

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
63	Dr. Thomson, l. c., p. 305	24 years, M.	Around the umbilicus was an oval swelling larger and longer than a turkey's egg	40 days, recovery	The whole of the cæcum with its appendix was discharged per anum	Recovery by gangrene.
64	Dr. Thomson, l. c., p. 308; also 1836, p. 374	4½ years, M.	Colicky pains in the belly, with passage of blood; protrusion of intestine from anus five days before its separation	Some days, recovery	The boy, while suffering from smallpox, passed the whole of the cæcum with its appendix, and part of the ileum	Ditto.
65	Dr. Baillie, Trans. Soc. Improvement of Med. Knowledge, vol. ii, p. 144. (Dr. Thomson, l. c., p. 312)	50 years, F.	Frequent passage of blood and vomiting; diarrhoea came on and lasted for many days	"Many days," death	No autopsy. A yard of colon was passed three weeks before death	Death, although the gangrenous bowel had passed.
66	Dr. Thomson, l. c., p. 313	30 years, F.	Colic, fever, stercoraceous vomiting. On the 8th day the cæcum and a part of the colon were passed	Death	She died a fortnight after the separation of the bowel in connection with a confinement of a stillborn child; the whole abdomen was filled with purulent serum	Ditto.
67	Dr. Thomson, l. c., 1836, p. 378	40 years, F.	After various abdominal symptoms, passage of a membranous substance	Recovery	It was considered to be the cæcum which was passed	Recovery by gangrene.
68	Dr. Thomson, l. c., p. 378	35 years, M.	Dysenteric symptoms; about 18 inches of colon passed	15 days, recovery	—	Ditto.
69	Dr. Thomson, l. c., p. 380. From Meckel	17 years, F.	"A fever, attended at first with constipation, and then with diarrhoea"	4 weeks, death	Separation of cæcum and appendix, and later, of whole of transverse and ascending colon with portion of ileum, thirteen inches in length, "so far intus-	Death long after gangrenous detachment of the bowel.



70	Dr. Thomson, l. c. p. 380	7 years, F.	Fever and pains in the abdomen; in the region of the loins was felt a pretty hard swelling of the size of a goose's egg; at length the whole caecum with its vermiform appendix was discharged per anum	Death	At first the patient improved after passage of the intestine, but was at last carried off by fever, colic, vomiting, and diarrhoea. The caecum and part of the ileum had evidently been invaginated into the colon, and had sloughed off.	The cause of death is not stated. Death occurred after gangrenous separation.
71	Hill, Month. Jour. Med. Sci., vol. v, 1845, p. 572. (Dr. Peacock, Path. Tr., xv, p. 122)	65 years, F.	Constipation, vomiting, diarrhoea; constipation for a week; then in five days passage of <i>forty-four</i> inches of intestine; forty days later she sank, exhausted	53 days, death	The portion passed proved to have been the sigmoid flexure; only fourteen inches of colon remained and terminated in a cavity containing faeces from which the rectum arose.	
72	Dr. Peacock, l. c. p. 122	67 years, F.	Pain followed by diarrhoea; a large portion of the rectum and colon was passed on the fifteenth day	15 days, recovery	She ultimately recovered, but suffered from pain in the abdomen.	
73	Dr. Hunter (Jedburgh), Lancet, Mar. 9, 1872	9 mos.	Was not very fretful nor peevish; took the breast well till near the end; was very thirsty, and drank eagerly of water; vomiting was almost constant, though it was not faecal at any time. For the last fortnight the ileo-caecal valve protruded at the anus often to more than an inch beyond, and at other times lay up in the rectum when put up	20 days, death	The invagination had begun at the ileo-caecal valve.	

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
74	Wilson, Clinical Record, Feb. 1870. (Virchow's Jahrb., 1870, Bd. ii. Abth. 3)	4 mos.	—	7 days, death	Ileum, cæcum, and colon invaginated into the colon and upper part of the rectum.	
75	Wagner, Jahrb. f. Kinderh., n. f. iii, 343	2 years, M.	The tumour was felt on rectal examination; after inflation the tumour at once disappeared	Recovery	The child remained well at the end of eighteen months	Recovery after inflation.
76	Ditto	4 years, M.	Tumour on the left side of the abdomen; none felt on examination per anum	Recovery	Clysters had no effect. After eight pumpings with bellows a loud report was heard; the next day there were signs of the tumour returning, but the whole disappeared after inflation. The child remained well	Ditto.
77	Dr. S. Wilks, Lancet, May 21, 1870	6 mos, M.	Sickness; blood by rectum; lump felt to left, above umbilicus, which hardened on pressure. On passing the finger into the rectum a round projection could be felt four inches up with a circular orifice in the centre; inflation was used and the tumour disappeared	24 hours, recovery	"Ileum into cæcum probably." The child remained well for about a fortnight, was then brought with a lump again to be felt and had passed blood. The mother declined further treatment, and the case was lost sight of	The result remained doubtful.
78	Dr. Hilton Fagge, Guy's Hosp. Rep., 1869, p. 289	5 years, M.	Pain and abdominal tumour the only symptoms for two (? four) months; symptoms of strangulation with hæmorrhage four days before death. Peculiar feeling of hardness whenever tumour was grasped; only half	4 months, death	The ileum, cæcum, and colon intodescending and sigmoid colon. Shreds of lymph (adhesions) of no very recent formation united the parts together; no ulceration nor gangrene; the finger could easily be passed along the entering	

79	Ditto, p. 302	1 year	a pint of gruel could be thrown up	Had passed blood; twelve inches of intestine (ileum, cæcum, and colon) sloughed	Recovery	bowel which was not strangulated. "The inner layers of the bowel were but little inflamed, and were far from having commenced to slough off."	Recovery by sloughing.
80	K. v. Mosengeil, Arch. f. Klin. Chir., xii, p. 75	7 mos., M.		Doubtful symptoms for fourteen days; then for four days constipation, straining, and protrusion of a tumour nearly to the anus; next day prolapsus; this increased on following day, and the whole was replaced by a catheter. The child appeared well. In a few hours the protrusion returned and no efforts were successful in reducing it. Three days later some mucous membrane sloughed; the next day an artificial anus was formed in the left groin, and an intussuscepted portion of gut found in the portion opened. A catheter could be passed a long way up by the side of the invaginated portion. On the third day afterwards the child died	27 days, death	At first, injections of water and the use of a sound did not succeed, then the latter replaced the intussusception; but later in the same day nothing was of any avail. No post-mortem. The operation performed was of no avail. The operator recommends that in future the incision should be made on the right side. He would have done so here afterwards, but the child was too exhausted	The question of performing abdominal section and replacing the intestine does not seem to have been entertained. It would appear to have been a favorable case. The case is exceptional in respect to the long survival of a very young child.
81	Dr. Steffen. (Dr. Pilz, Jahrb. f. Kinderheilk., n. f., iii, p. 6, 1870)	3 mos., M.		Well-marked symptoms	4 days, death	Post-mortem.—Ileum, cæcum, and colon into descending colon; the folds were covered with blood-stained mucus and what seemed to be layers of fibrine	Cited on account of condition at post-mortem.

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
82	Dr. Ecker (ibid.)	6 years, M.	Well-marked symptoms; passage of portion of small intestine; yet, on the fourteenth day, sudden symptoms of peritonitis	Death	No post-mortem	Cited as fatal result after sphacelus.
83	Dr. O. Groos. Berlin. Klin. Woch., 1870, p. 396. (Esterl. Jahrb. f. Päd., 1871, Bd. ii, p. 58.)	6 mos., M.	After twenty-four hours tumour in left abdomen and in rectum; third day prolapsus; attempts with finger and with clysters without success; repeated second day	5 days, death	<i>Post-mortem</i> .—Peritonitis. Old adhesions of parts of ileo-colic intussusception to each other. The author remarks that the intussusception must have been of old standing, and that the symptoms came on when the passage previously existing was blocked by the subsequent invagination of small intestine into it.	
84	Dr. Max. Herz (l. c. 1872, Bd. i, p. 5)	7 mos., F.	Sickness and constipation; clysters thrown up on third and fourth days; on fifth day blood and slime passed; no tumour; injection of air; sixth day tumour left side of abdomen and in rectum; on the seventh day convulsions	6 days, death	No post-mortem. See also case of abdominal section.	
85	Dr. Faber, Wurtemb. Corresp. Blatt., No. 25 (Virehow's Jahresb., 1870, Bd. ii, p. 160)	11 years, M.	Tumour in abdomen just under navel; passage of blood. The tumour was long and tolerably hard	Recovery	After four injections of cold water at different times the tumour disappeared	? Examined by rectum.

86	Van Nes, Schmidt's Jahrb., Bd. iv. 1848, p. 59 (No. 42, Pilz*) (Jahrb. f. Kindhik., n. f., Bd. iii, 1870)	5 mos., M.	Blood-stained mucus	7 days, recovery	<p>[* This with the others so marked are given by Pilz as cases of intussusception into or beyond the rectum, in which recovery resulted, and for that reason we quote them. He gives no details. We have obtained particulars of the others; they amount to eight recoveries out of forty of such cases. All are given here.]</p> <p>The account in Schmidt's Jahrb. seems doubtful.</p>
87	Gelmo, Jahrb. f. Kindhik., Bd. v, p. 175	8 mos., M.	Seen on fourth day; injections of water of no use; fifth day, air no use; intussusception descending; sixth day, tumour felt in the rectum; after seven injections of water the tumours disappeared	5 days, recovery	<p>On the fifth day calomel was given in two-grain doses every half hour, i.e. ten grains altogether. The author remarks that his case was interesting, because "in spite of the five days' duration, no adhesion of the surfaces had occurred"</p> <p>In this case per-severance with water injections succeeded after insufflation had failed.</p>
88	Nissen, Ficke und Opp. Zeitschr., Bd. xix, p. 162 (78 Pilz)*	9 mos., F.	Tumour on left side of abdomen; prolapse; reposition with a sound and injections of water	9 days, recovery	
89	Neumann, Inaug. Diss. Halle, 1842 (79 Pilz)*	9 mos., M.	Colon into descending colon; tumour felt by the rectum; sound used	3 days, recovery	
90	Legoupié, Gerson Magazin. (120 Pilz)*	4½ years, M.	Ileo-colic; prolapse; blood passed	30 days, recovery	
91	Prestat, Journ. f. Kinderkrank., 1863, Bd. xii, p. 310	9 years, F.	Symptoms of intussusception, then prolapse, which was re-placed, but the child soon afterwards passed a mass of intestine	7 days, recovery	<p>Splacelus on eighth day; the lower end of the small intestine with a fold of mesentery. The child was under observation for a year afterwards.</p>

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
92	Gieffers, Caspar's Woch., 1815 (156 Pilz)*	13 years	Prolapsus	Recovery	Sphacelus of twelve inches and a half of large intestine	Recovery by gangrene.
93	Van Nee, Schmidt's Jahrb., 1848, Bd. lvii, p. 59	9 mos., M.	Tumour felt in rectum and in abdomen. "After three days symptoms of peritonitis"	3 to 4 days, death	Transverse colon into descending colon and rectum. After death he opened the abdomen on the left side, in front, and then the intestine. He found a long invagination and could not reduce it; he also found evidences of peritonitis.	
94	Dr. H. A. Beach, Boston Med. and Surg. Journ., Nov. 5, 1868	24 years, M.	Tumour felt in rectum after injections had been given and the lower part of the rectum cleaned out	85 hours, recovery	He placed the man "on his shoulders and knees" and gave injections. The intussusception slipped up, but returned when the man moved about four hours afterwards. It was again driven up	Recovery by injective treatment.
95	W. Pepper, Phil. Med. Times, Sept. 1, 1871 (Virchow's Jahresb., 1871, Bd. ii, p. 152)	6 mos.	—	4 days, death	Invagination of ileum, cæcum, and colon into colon.	
96	Cooke, New York Med. Record, May 1, 1871	An adult ?	Constipation; passage of slime for three or four days, then an intussusception detected in the rectum	5 days, recovery	The tumour was pushed up as far as possible, then driven still farther by injections while the patient was on knees and elbows. The next day the injection was repeated and an evacuation followed	Recovery by injections.

97	Kjelberg and C. Blix (Virchow's Jahresb., 1871, Bd. ii, p. 606)	11 mos., F.	Tumour felt in abdomen and by rectum; attempts at reduction fruitless	Death	Invasion of ileum and colon into descending and sigmoid colon.	Recovery by gangrene.
98	Gaetano Moretti, Annali Univ. di Med. Giugno (Virchow's Jahresb., 1871, Bd. ii, p. 153)	40 years, M.	Symptoms of invagination; prolapse of sixteen inches of intestine; it could easily be pushed back a certain distance, but no farther; finally, it came away altogether	Recovery	The portion of intestine which came away was sixteen inches long, and was believed to belong to the sigmoid flexure of the colon. The patient remained under observation for two months, and was then quite well	
99	Dr. Hodges, Boston Med. and Surg. Journ., Aug. 6, 1868, p. 5	3 years	After various symptoms of colic, vomiting came on, and tumour felt in right iliac fossa; none in rectum. Two days later blood passed, and the next day a tumour was found in the rectum. On the following day the child was sent to hospital. Tumour felt in rectum, and made visible by the use of a speculum. Child in a moribund condition. A steel sound was used, and the tumour pushed out of sight, but the child died eight hours later	4 days? death	<i>Post-mortem.</i> —The cæcum was found to present. No statement as to peritonitis	Tumour made visible by use of a speculum.
100	Hachmann, Zeit. f. gesant. Med. v. Fricke u. Oppen., Bd. xiv, p. 289 (No. 1 Plz)	11 weeks, M.	Passage of blood; tumour in abdomen and in rectum	5 days, death	Ileum, cæcum, and colon into colon as far as the rectum.	

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
101	L. Smith, N. York Path. Soc., 1861 (No. 8, Filz)	3 mos., M.	Passage of blood; tumour in abdomen and in rectum	8 days, death	Ileum through the colon.	See No. 121.
102	Plath, Caspar's Woch., 1839, p. 432 (No. 10, Filz)	16 weeks, M.	Passage of blood; tumour in abdomen and in rectum	2 days, death	Cæcum and colon into descending colon and rectum; there was no gangrene. The intussusception, it is said, could not be drawn out, owing to constriction at its commencement.	
103	Basedon, Siebold Journ. f. Geburtst., Bd. vii, p. 512 (No. 26, Filz)	4 mos.	Passage of blood; tumour in rectum	2 days, death	Colon ascends in colon descendens.	
104	Dr. Staag, Journ. fur Kinderkrank., 1863, Bd. ii, p. 130	5½ mos., M.	Passage of blood-stained mucus; tumour could be felt in the abdomen, and could be seen through the distended anus; a sound was used and clysters were thrown up without effect	4 days, death	Cæcum and colon into colon (transverse). There was a plastic exudation on the layers of intestine in the intussusception, but it did not amount to much; the layers were cut open.	
105	Schwarzwelder, Gaz. Hebdom., 1857, p. 583 (No. 73, Filz)	7 mos., F.	Blood-stained mucus passed; prolapse; tumour in abdomen noticed	6 days, death	Ileum, cæcum, and colon into colon and rectum; no peritonitis. (Quoted in Gaz. Hebdom. from the Cincinnati Med. Observer, July, 1857, p. 295; case under the care of Mr. Wilson.)	
106	Husch, Caspar's Woch., 1838, p. 647 (No. 81, Filz)	9 mos., F.	Blood passed; prolapse; the cæcum was outside the anus	30 hours, ?	Ileum, cæcum, and colon into rectum. There were no adhesions nor any exudation.	



107	Dr. Thoroughgood, Med Times and Gaz., 1861, vol. ii, p. 160	9 mos., F.	Blood-stained mucus passed; a large, elongated tumour felt on the left side of the abdomen	4 days, death	Ileum, cæcum, and colon into descending colon; no adhesions, no softening, nor gangrenous ap- pearance of any kind.
108	Mr. Matthias Rowe, Lond. Med. Gaz., vol. xv, October 25, 1834	10 mos.	Passage of blood-stained mucus; tumour felt in rectum	30 hours, death	The ileum, cæcum, and colon in the rectum. A drawing of the parts is given. "It was with difficulty that the colon could be drawn out of the rectum."
109	Augustin, Diss. Inaug. Halle, 1836 (No. 103, Filz)	2 years, M.	Blood-stained mucus; tumour in abdomen and in rectum	11 days, death	Colon transverse, and descend- ing in the rectum.
110	Abercrombie, Dis- eases of the Stomach, p. 123	2 years and 5 mos., M.	Vomiting, pain, passage of bloody mucus and blood; prolapse on second day; the caput coli protruded	2 days, death	Ileum, cæcum, and colon into colon. There was congestion, no adhesions; the ileum was toler- ably healthy.
111	Neumann, Diss. Inaug. Halle, 1842 (No. 109, Filz)	3 years, M.	Blood passed; prolapse; tu- mour in abdomen	5 days, death	Colon descending and part of rectum into rectum.
112	Abercrombie, l. c., p. 124	4 years, M.	"It exactly resembled the pre- vious one, except that it was not so extensive"	5 or 6 days, death	Colon descending and part of rectum into rectum.
113	Neumann, l. c. (No. 130, Filz)	6 years, M.	Blood passed; no tumour no- ticed in abdomen, but one was felt in the rectum	6 days, death	Ileum, cæcum, and colon into rectum.
114	E. Mayer, Percus- sion der Unterleibs, p. 85 (No. 140, Filz)	8 years, F.	Blood passed; prolapse	11 days, death	Cæcum and colon into rectum.

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
115	Thomann, Hansen, No. 47 (148, Pilz)	11 years, M.	Prolapse	Some days, death	Ileum, caecum, and colon into colon and rectum.	
116	Dr. H. C. Rose, Med. Times and Gaz., June 8, 1861, p. 597	5 mos., F.	Vomiting; passage of blood	3 days, death	Transverse into descending colon; there were no adhesions. The invagination was about four inches long.	
117	Abercrombie, l. c., p. 124	6 mos.	Vomiting; passage of bloody mucus; tumour in left side of abdomen; injections could not be made to pass up	3 days, death	Ileum and colon into sigmoid flexure; the included parts were very dark coloured, turgid, and in some places ulcerated.	
118	Bock, Schmidt's Jahrb., 146 Bd., 1870, p. 176	10 years, M.	Symptoms of intussusception, and on 17th day tumour detected on left side of abdomen; then it disappeared, owing, as was supposed, to subcutaneous injection of morphia. On 7th day after tumour reappeared; same treatment adopted. Finally symptoms of peritonitis. As the subcutaneous injections seemed so successful at first, no other treatment was adopted the second time	43 days, death	Ileum, caecum, and colon invaginated into descending colon; perforation above intussusception had occurred.	
119	Spaeth, Virchow's Jahrb., 1869, Bd. ii, Abth. I, p. 138	36 years, M.	After two and a half months, blood stools, and tumour felt left of abdomen; then symptoms of peritonitis. It is said that no tumour could be felt in the rectum	6 mos., death	Ileum, caecum, and colon into colon; perforation of the colon to an extent sufficient to allow the caecum to protrude through it.	

120	Dr. Stephen Rogers, New York Med. Record, May, 1871, p. 115	7 years, M.	Passage of bloody mucus; sickness; tumour in left side of abdomen, which changed position and became harder at times. The 2nd day, diagnosis made, and injection of air and kneading tried, but given up; then salt and water tried and continued. At first only four ounces could be thrown up; then, by evening, twelve ounces. On 3rd day sixteen ounces; and on 4th day, though bloody mucus passed, eighteen ounces, and the tumour disappeared. Morphia was given also	3 days, recovery	Experiments Dr. Rogers had made on the cadaver had shown that the ileum, artificially protruded through the ileo-cæcal valve, could be pushed back by inflation. The attempt to force fluid through the valve, so as to reduce an invagination of the small intestine higher up, succeeded in two or three experiments on the cadaver without difficulty; in others it was impossible to send the fluid past the valve until a little manipulation removed the obstruction. He discussed and advocated the propriety of opening the peritoneal cavity in extreme cases, and applying taxis directly to the bowel affected	Recovery by injection treatment.
121	Dr. Plath, Caspar's Wochenschr., 1839, p. 432	14 weeks, M.	Passage of bloody mucus; sickness; fullness on left side of abdomen more distinct on the second day	3 days, death	Ileum, cæcum, and colon into colon and rectum. The cæcum was just above the orifice of the anus; the intestine was on the point of becoming gangrenous; it could not be replaced without laying open the outer sheath. (This case occurred before No. 102, in which an anal examination was made.)	
122	Thomas, Journ. f. Kinderkrank., 1866, Bd. xlvii, p. 23	22 weeks, M.	Passage of blood; tumour felt left side of abdomen; sickness and constipation; tumour not felt per rectum; clysters were of no effect	4 days, death	Ileum, cæcum, and colon into colon and sigmoid flexure, close to rectum. On attempting to withdraw the small intestine it tore at one part; there was no peritonitis.	

No.	Reference.	Age and Sex.	Symptoms and Treatment.	Duration and Result.	Details of Autopsy or of Recovery.	Remarks.
123	Thomas, Journ. f. Kinderkrank., 1866, Bd. xvi, p. 23	6 mos., M.	Passage of blood; sickness; on third day no tumour; on fourth day tumour felt by rectum; a sound pushed the tumour back	3 days, death	Ileum, cæcum, and colon into colon and rectum; no peritonitis. Considerable force was required to withdraw the intestine, aided by a push from below.	
124	Ditto	23 weeks, M.	Passage of blood; tumour in abdomen second day: nothing felt by rectum; clysters, insufflation, and use of sound without avail	3 days, death	Colon ascending and transverse into descending; suspected to have been partially reduced; no peritonitis; no statement as to possibility of reduction.	
125	Ditto	16 mos., M.	Tumour left side of abdomen and prolapse; the latter was pushed back; the anus remained patent. The next day patient seemed better, but still passed bloody slime, and the anus was still patent. On the following day the anus closed; the peristaltic action was not re-established, probably owing to the long constriction	5 days, death	At the post-mortem the intestine was found to have been replaced	Dr. Schütz (Preg. Vierteljahrs., 1868, Bd. ii, p. 10) insists on the value of relaxation of the anal sphincter as a sign of intussusception.
126	Judson, Southern Med. and Surg. Journal (Gaz. Med., 1887)	5 mos., M.	Sickness; passage of blood; no note as to tumour in abdomen or in rectum. Death appears to have occurred within twelve hours of the passage of the blood and about twenty-four of the first symptoms	1 day, death	Ileum, cæcum, and colon invaginated into rectum, reaching six inches below the sigmoid flexure. It is noted that there was no peritonitis, nor adhesions, nor any effusion, but that the intestine was gangrenous (no description, only black from congestion?). An attempt to withdraw the invaginated bowel was	

127	Herbst, Rust. Magazin, Bd. xvi, p. 105 (44 Pilz)	20 weeks	Passage of bloody mucus; tumour in abdomen	24 hours, death	Descending colon invaginated into the rectum.	unsuccessful, and the reporter remarks that if an operation had been undertaken the intestine could not have been liberated.
128	Forke, Untersuch. u. Beobach. über d. Ileus, &c., p. 39 (48 Pilz)	25 weeks, F.	Passage of bloody mucus	36 hours, death	Cæcum invaginated into the rectum.	
129	Wiegand, Hufe- land's Journ., Aug., 1830, p. 63 (50 Pilz)	6 mos., M.	Passage of bloody slime	2 days, death	Ileum and cæcum into de- scending colon and sigmoid flex- ure	Could have been felt?
130	Krukenberg, Jahr. d. ambul. Klinik., Bd. ii, p. 38 (97 Pilz)	More than a year	Passage of bloody slime; tumour noticed in abdomen	18 days, death	Ileum, cæcum, and colon into the rectum.	
131	Roth, Wurtzb. Med. Zeit., Heft 3, 2, 1862	28 years, M.	Sudden, severe pain over sym- physis; shivering and fever; then brownish, jelly-like motions. On the fifteenth day vomiting and prolapse of the rectum occurred, but was reduced. Afterwards a round, hard, ill-defined tumour was felt in the left iliac fossa, and on examination by the rectum an obstruction was met with pro- duced by an oblong, hardish tumour with a slit-like opening (resembling the os tincae) at its lower end	3 weeks, recovery	The treatment consisted of the use of long-continued warm baths, frequent injections of luke- warm water, and the administra- tion of castor-oil occasionally during a portion of the time. Daily examinations were made per rectum, but it did not seem that the injections had any effect; finally, the tumour disappeared. It is noted as a case of sponta- neous reposition; the attempts to effect reduction by surgical pro- cedures being unavailing	Supposed spon- taneous reposition.